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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/525,239

10/12/2005

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Q86397

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23373 7590 06/29/2007
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EXAMINER

GOLDBERG, BRIAN J

ART UNIT

PAPER NUMBER

2861

MAIL DATE

DELIVERY MODE

06/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/525,239

Applicant(s)

AKASE ET AL.

Examiner

Brian Goldberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/22/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process. A claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality is nonstatutory functional descriptive material. When a computer program is claimed in a process where the
When a computer program is recited in conjunction with a physical structure, such as a computer memory, the claim is a product claim. Neither of these is satisfied by the instant claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-10, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Oda (US 5277506).

7. Regarding claim 1, Oda discloses "a sensor (11 of Fig 2) that is capable of detecting an edge, in said scanning direction, of said medium to be printed (col 4 ln 43-44, ln 55-57, col 5 ln 25-26), wherein said print start position is determined based on a result of detecting said edge of another medium to be printed (col 5 ln 25-29, ln 50-64)."

8. Regarding claim 2, Oda discloses "wherein said result of detecting said edge of said other medium to be printed is stored (42 and 43, ROM and RAM; col 4 ln 55-57, col 5 ln 25-29); and wherein when printing on said medium to be printed, the stored detection result is read out, and said print start position is determined based on that detection result (col 5 ln 59-65)."

9. Regarding claim 3, Oda discloses "wherein said sensor (11 of Fig 2) is provided on a carriage (3 of Fig 2) that is movable in said scanning direction (see Fig 2, col 4 ln 18-20)."

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10. Regarding claim 4, Oda discloses "wherein said print start position is determined based on information about a position of said carriage for when said sensor detected said edge of said other medium to be printed (col 4 ln 41-45, col 5 ln 50-58)."

11. Regarding claim 5, Oda discloses "wherein said position of said carriage is detected using an encoder (col 4 ln 1-5)."

12. Regarding claim 6, Oda discloses "wherein said information about said position of said carriage for when said sensor detected said edge of said other medium to be printed is stored (col 4 ln 41-45, col 5 ln 24-35); wherein when printing on said medium to be printed, said information about said position of said carriage that has been stored is read out (col 5 ln 50-57); and wherein said print start position is determined based on said information about said position of said carriage that has been read out (col 5 ln 50-58)."

13. Regarding claim 7, Oda discloses "wherein information about a relative positional relationship between said edge of said medium to be printed and said print start position is obtained (C1, C2, W1, W2, col 4 ln 37-40); and wherein said print start position is determined based on this information and said result of detecting said edge (col 4 ln 45-57, col 5 ln 30-58)."

14. Regarding claim 8, Oda discloses "wherein said information about said relative positional relationship between said edge of said medium to be printed and said print start position includes information about a blank space that is to be formed on said medium to be printed (C2 of Figs 2 and 5, col 4 ln 30-32)."

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15. Regarding claim 9, Oda discloses "wherein information about said medium to be printed is obtained (C1, C2, W1, W2, col 4 ln 37-40); and wherein said print start position is determined based on said information about said medium to be printed and said result of detecting said edge (col 4 ln 45-57, col 5 ln 30-58)."

16. Regarding claim 10, Oda discloses "wherein said information about said medium to be printed includes information about a width of said medium to be printed (W1, W2 of Figs 2 and 5)."

17. Regarding claim 12, Oda discloses "a sensor (11 of Fig 2) that is capable of detecting an edge, in said scanning direction, of said medium to be printed (col 4 ln 43-44, 55-57, col 5 ln 25-26); wherein said sensor is provided on a carriage (3 of Fig 2) that is movable in said scanning direction (see Fig 2, col 4 ln 18-20); wherein a position of said carriage is detected using an encoder (col 4 ln 1-5); wherein information about said position of said carriage for when said edge of said other medium to be printed was detected is stored (col 4 ln 41-45, col 5 ln 24-35); wherein at least one of information about a width of said medium to be printed and information about a blank space that is to be formed on said medium to be printed is obtained (W1, W2, C2 of Figs 2 and 5, col 4 ln 30-32, ln 37-40); wherein when printing on said medium to be printed, said information about said position of said carriage is read out (col 5 ln 50-57); and wherein said print start position is determined based on said information about said position of said carriage, and at least one of said information about the width of said medium to be printed and said information about the blank space that is to be formed on said medium to be printed (col 4 ln 41-57, col 5 ln 30-58)."

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18. Regarding claim 14, Oda discloses "a step of detecting an edge, in a scanning direction, of another medium to be printed (col 4 ln 43-44, ln 55-57, col 5 ln 25-26); a step of determining a print start position based on a result of detecting said edge of said other medium to be printed (col 5 ln 25-29, ln 50-64); and a step of ejecting ink droplets, in said scanning direction, from the determined print start position to print on a medium to be printed that is different from said other medium to be printed (col 5 ln 58-65)."

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oda in view of Wen (US 6109745). Oda discloses the claimed invention as set forth above regarding claim 1. Oda also discloses "wherein said print start position is a position in said scanning direction that is outside of or on the edge of the medium to be printed (not explicitly stated, but C2 of figures 2 and 5 could be zero, which satisfies these conditions)." Thus Oda meets the claimed invention except "wherein printing is carried out on an entire surface of said medium to be printed."

21. Wen teaches "wherein printing is carried out on an entire surface of said medium to be printed (see Figs 3a-c)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to print on an entire surface of the medium. One would have been motivated to so modify Oda for the benefit of achieving

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borderless printing that is desirable to photographic viewers, which also eliminates any waste medium.


22. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oda. Oda discloses "a function of detecting an edge, in said scanning direction, of said medium to be printed (col 4 ln 43-44, ln 55-57, col 5 ln 25-26); and a function of determining said print start position based on a result of detecting said edge of another medium to be printed (col 5 ln 25-29, ln 50-64)." Oda does not explicitly disclose a program, but does disclose the process being claimed, as well as a control section 40 constituted of a ROM 42, RAM43, I/O ports 45 and 46, and interface 44, which would inherently be run by a program. It is also well known in the art to provide any control process in a program.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian Goldberg 
AU 2861
June 24, 2007



MATTHEW LUU
SUPERVISORY PATENT EXAMINER